

# UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FII	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/051,003	0	1/18/2002	Patrick C. Marks	9319	7774
75	90	04/07/2005		EXAMINER	
William W. Habelt				NGUYEN, TU MINH	
Carrier Corpora P.O. Box 4800	tion	•		ART UNIT	PAPER NUMBER
Syracuse, NY 13221				3748	
				DATE MAILED: 04/07/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Commons	10/051,003	MARKS ET AL.	
Office Action Summary	Examiner	Art Unit	1
	Tu M. Nguyen	3748	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	i6(a). In no event, however, may a reply be tin within the statutory minimum of thirty (30) day ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).	1
Status			
1) Responsive to communication(s) filed on 28 Se	entember 2004.		
	action is non-final.		
3) Since this application is in condition for allowar		osecution as to the merits is	
closed in accordance with the practice under E			
Disposition of Claims			1
,	11	•	
4) Claim(s) 3,4 and 7-12 is/are pending in the app			
4a) Of the above claim(s) is/are withdray	whitem consideration.		•
5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) <u>3,4 and 7-12</u> is/are rejected.			
7) ☐ Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/or	election requirement.		a
	,		
Application Papers	•	•	
9) The specification is objected to by the Examine			
10) ☐ The drawing(s) filed on 18 January 2002 is/are:	, , , , ,	•	
Applicant may not request that any objection to the			
Replacement drawing sheet(s) including the correcting 11) The oath or declaration is objected to by the Ex			4
			•
Priority under 35 U.S.C. § 119		. (1) (0	
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents	s have been received.		
<ul><li>2. ☐ Certified copies of the priority documents</li><li>3. ☐ Copies of the certified copies of the prior</li></ul>	ity documents have been receive		•
application from the International Bureau		- d	
* See the attached detailed Office action for a list	or the certified copies not receive	ea.	
Attachment(s)	_		
1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary Paper No(s)/Mail D	(PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)		ate Patent Application (PTO-152)	a
Paper No(s)/Mail Date	6) Other:		

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## **DETAILED ACTION**

1. In view of an Applicant's Supplemental Paper filed on September 28, 2004 in response to a Remand by the Board of Patent Appeals and Interferences, PROSECUTION IS HEREBY REOPENED. A new non-final rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office Action is non-final) or a reply under 37 CFR 1.113 (if this Office Action is final); or,
  - (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Overall, claims 3, 4, and 7-12 are pending in this application.

## Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3, 4, and 7-12 are rejected under 35 U.S.C. 112, second paragraph, because the base claims 3 and 7 recite the limitation "said means for changing the frequency response"; and base claim 9 recites the limitation "said means for changing the frequency". These limitations

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are not consistent with the limitation "means for attenuating noise" as earlier claimed. As such, applicant should amend the base claims so that the phrase following the word "means" is consistent throughout the base claims.

In addition, based on the Applicant's Supplemental Paper, applicant failed to include the equivalents of the element for the "means plus function" limitation. For example, applicant specified numerals 150-2 and 150-3 for the embodiment of Figures 4-6 in the limitation "said means for changing the frequency", however, failed to specified the same numerals for the limitation "means for attenuating noise". Thus, it is impossible for the examiner to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 3, 7, and 9, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Jessberger (U.S. Patent 6,494,290).

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Re claim 3, as shown in Figures 2-3, in a system having a multi-speed engine with an air inlet line (1) connected to the engine, Jessberger discloses a Helmholtz resonator structure comprising:

- a closed chamber (9) configured as a single dead end side branch connected to the inlet line and defining a Helmholtz resonator continuously operatively connected to the inlet line via a restricted connection (7) (the restricted connection (7) is always or continuously connected to the closed chamber (emphasis added); the restricted connection (7), even though in only periodic fluid communication with the closed chamber, is always in operation to reduce noise in the air inlet line when the engine is in operation); and

- means (10, 7, 8) for attenuating noise in a plurality of frequencies by changing the frequency response of the Helmholtz resonator responsive to changes in speed of the engine (also see Figures 5 and 6);

wherein the means for attenuating noise includes at least one restricted connection (8) which is selectively connected between the chamber and the inlet line (connection (8) is selectively opened or closed (lines 8-15 of column 3)).

Re claim 7, as shown in Figures 2 and 3, Jessberger discloses a system having a multi-speed engine with an inlet line (1) connected to the engine, microprocessor means (not shown but inherently must have) for controlling the speed of the engine, the improvement comprising:

- a closed chamber (9) configured as a single dead end side branch connected to the inlet line and defining a Helmholtz resonator continuously operatively connected to the inlet line via a

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restricted connection (7) (the restricted connection (7) is <u>always or continuously connected</u> to the closed chamber (emphasis added); the restricted connection (7), even though in only periodic fluid communication with the closed chamber, is always in operation to reduce noise in the air inlet line when the engine is in operation); and

- means (10, 7, 8) for attenuating noise in a plurality of frequencies by changing the frequency response of the Helmholtz resonator responsive to changes in speed of the engine (also see Figures 5 and 6);

wherein the means for attenuating noise includes at least one restricted connection (8) which is selectively connected between the chamber and the inlet line (connection (8) is selectively opened or closed (lines 8-15 of column 3)).

With regard to the preamble directed to "a refrigeration system", a preamble to a claim is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self contained description of the structure not depending for completeness upon the introductory clause. See *Kropa v. Robie, supra at 480*. See also *Ex parte Mott*, 190 USPQ 311, 313 (PTO Bd. of App. 1975). Clearly, the pending base claim 7 does not rely on the preamble for completeness.

Re claim 9, as shown in Figures 2 and 3, Jessberger discloses a system having a multi-speed engine with an inlet line (1) connected to the engine, microprocessor means (not shown but inherently must have) for controlling the speed of the engine, the improvement comprising:

- a closed chamber (9) configured as a single dead end side branch connected to the inlet line and defining a Helmholtz resonator continuously operatively connected to the inlet line via a

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restricted connection (7) (the restricted connection (7) is <u>always or continuously connected</u> to the closed chamber (emphasis added); the restricted connection (7), even though in only periodic fluid communication with the closed chamber, is always in operation to reduce noise in the air inlet line when the engine is in operation); and

- means (10, 7, 8) for attenuating noise in a plurality of frequencies by changing the frequency response of the Helmholtz resonator responsive to changes in speed of the engine (also see Figures 5 and 6);

wherein the means for attenuating noise includes a valve (10) having only an open and a closed position (valve (10) is alternately closed and opened (line 13 of column 3).

With regard to the preamble directed to "a refrigeration system", a preamble to a claim is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self contained description of the structure not depending for completeness upon the introductory clause. See *Kropa v. Robie, supra at 480*. See also *Ex parte Mott*, 190 USPQ 311, 313 (PTO Bd. of App. 1975). Clearly, the pending base claim 9 does not rely on the preamble for completeness.

## Allowable Subject Matter

6. Claims 4, 8, and 10-12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office Action and to include all of the limitations of the base claim and any intervening claims.

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#### Communication

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tu Nguyen whose telephone number is (571) 272-4862.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas E. Denion, can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**TMN** 

March 30, 2005

Tu M. Nguyen

**Primary Examiner** 

Tu M. Nguyen

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